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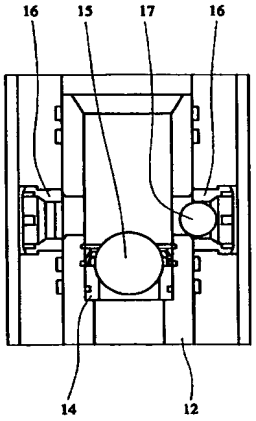
(54) Title: BALL OPERATED BY-PASS TOOL FOR USE IN DRILLSTRING



(57) Abstract: A by-pass tool (10) for incorporation in a drillstring (11), and which is adjustable between an inactive mode in which it allows fluid flow lengthwise of the drillstring during normal drilling operation, and an active by-pass mode when drilling is to be interrupted, said tool comprising: an outer casing (20); a sleeve (12) displaceable axially within the casing (20); a valve seat (14) associated with the sleeve (12) and arrange to receive an activating ball (15), when the latter is launched from the surface and down the drillstring, said valve seat (14) being operative to displace the sleeve (12) axially and thereby initiate adjustment of the tool from the inactive mode to the active by-pass mode; and by-pass port means (16) in the casing (20) and arranged to be closed by the sleeve (12) when the tool is in its inactive mode and to be opened to communicate with the interior of the drillstring when the tool is in its active mode, said by-pass port means (16) being arranged above the valve seat (14) so as to allow a locking ball (17) (when launched from the surface after the valve seat (14) has received the activating ball (15)) to partially block the port means (16) and thereby initiate flushing-out of any drillstring fluid debris above the valve seat (14) via the port means (16).

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